US-PAT-NO: **6389010**

DOCUMENT-IDENTIFIER: **US 6389010 B1**

TITLE: **Hierarchical data collection network supporting**

          packetized voice communications among wireless terminals

          and telephones

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Detailed Description Text - DETX (56):
   If the NET is lightly loaded, the pending message list is short, and the NET
is not subject to significant interference from other nearby NETs, the control
point device will generally specify a single slot 501 as shown in FIG. 5a, with
a p factor <1. In this case, the reservation phase is Idle Sense Multiple
Access ("ISMA"). Devices with transmission requirements that successfully
detect the Reservation Poll will transmit a Request for Poll ("RFP") with
probability p and defer transmission with probability 1-p. FIG. b shows a

device response address 65503 following the reservation poll.

Detailed Description Text - DETX (88):

   Using the ICMA method and **ISMA** method, it is possible to avoid the collision
of packets in advance during the period when it is reported that the common
channel is in use. Furthermore, if the mobile station does not transmit the
packet immediately when the common channel becomes idle, but, rather, waits for
a random period of time from when the common channel becomes idle before
transmitting the packet, or if the mobile station presets a probability for
transmitting immediately at the point where the common channel becomes idle
state, it then becomes possible to decrease the probability of a packet
collision immediately after the reported signal changes from a busy signal to
an idle signal.

Detailed Description Text - DETX (89):

   However, in the ICMA method and **ISMA** method, the base station changes the
reported signal from an idle signal to a busy signal by detecting the first
slot of the packet signal transmitted from the mobile station, so that a delay
occurs for the time from which the common channel is

actually in use until the
busy signal is reported. During this delay time, it is
impossible to avoid the
collision of packets. In particular, when the packet size
transmitted from the
mobile station is small, the ratio of the delay time for a
transmission time of
the packet signal becomes large, so that it is impossible
to avoid a packet
collision effectively.